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IBM CORPORATION (JSS)
C/O SCHUBERT OSTERRIEDER & NICKELSON PLLC
6013 CANNON MOUNTAIN DRIVE, S14
AUSTIN, TX 78749

EXAMINER
WU, JUNCHUN

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *31 March 2004*.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) *1-20* is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

DETAILED ACTION

1.   Claims 1-20 are pending in this application.

Claim Rejections - 35 USC § 101

2.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

3.   Claim 15 rejected under 35 U.S.C. 101 because in accordance with the disclosure, the

phrase machine-accessible medium contains a variety of signal-bearing medium such as signals,

carrier waves and light rays. Since those medium is not a tangible, physical article or object to

constitute a manufacture, and it is not a machine, process or composition of matter. Thus, claim

15 should be rejected as non-statutory.

4.   Claims 16-20 are dependent of claim 15 so they are rejected as the same reason as above.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1,2,6,7, and 9 are rejected under 35 U.S.C. 102(e) as being anticipated by Jorapur

(U.S. Pub. No. 20030204784 A1).

7.   Per claim 1

Jorapur discloses

- A method to test a code segment of a source file, comprising: machine-rendering a source

  code skeleton in response to a selection of the code segment ([Abstract] *"A system and*

  method provide testing of software in different configurations automatically. Templates

  may be provided for developers to create an application or for generating tests.").

- incorporating the code segment into the source code skeleton to generate a temporary

  source file ([0026] *"one or more standard templates may be provided and an application*

  may be generated by generator.").

- inserting a monitoring statement into the temporary source file, the monitoring statement

  to provide runtime data associated with the code segment ([0026] *"testing may involve*

  inserting test code into the software to be tested..." & [0034] *"the generator may be*

  configured to access a library of deployment descriptors to generate deployment

  descriptors that will configure run time environments to execute tests.").

- compiling the temporary source file into a compiled program to output a result based

  upon the monitoring statement when the temporary source file is executed ([0031] *"the*

  test code may provide reports on processes that are not normally visible to users during

  execution" & [0040] *"after different test was inserted before compilation and/or*

  packaging").

8.   Per claim 2

Jorapur discloses

the rejection of claim 1 is incorporated and Jorapur further discloses

- executing the compiled program ([0042] *"the test may be executed to assess*

  the operation and functions of the application to be tested as deployed").

- outputting the result in response to the executing, wherein the result is based upon the

  monitoring statement ([0042] *"Data indicating the results of execution may be collected*

  during execution of a test.").

9.   Per claim 6

Jorapur discloses

the rejection of claim 1 is incorporated and Jorapur further discloses

- machine-rendering comprises copying external code referenced by the code segment into

  the temporary source file ([0034] *"the generator may be configured to access a library of*

  deployment descriptors to generate deployment descriptors that will configure run time

  environments to execute tests." & the external reference code i.e. Dynamic link library

  (DLL)).

10.   Per claim 7

Jorapur discloses

the rejection of claim 1 is incorporated and Jorapur further discloses

- inserting the monitoring statement comprises prompting a programmer to select a
  variable to associate with the result and inserting an assignment statement into the
  temporary source file to capture the runtime data from the selected variable ([0026]
  *"Through parameters, a user may indicate a standard template or may include more
  complex data indicating, for example, modules and/or functions to be included,
  communication protocols to be used, resources available, operating environment, etc. "*).

11.   Per claim 9

Jorapur discloses

- A system to test a code segment of a source file, comprising: a file creator to create a
  temporary source file in response to a selection of the code segment, wherein the
  temporary source file is based upon the code segment ([Abstract] *"A system and method
  provide testing of software in different configurations automatically. Templates may be
  provided for developers to create an application or for generating tests. "*).
- a code gatherer to copy external code referenced by the code segment into the temporary
  source file ([0034] *"the generator may be configured to access a library of deployment
  descriptors to generate deployment descriptors that will configure run time environments
  to execute tests." & the external reference code i.e. Dynamic link library (DLL))*.
- a code generator to insert a monitoring statement, the monitoring statement to provide
  runtime data associated with the code segment ([0026] *"testing may involve inserting test
  code into the software to be tested..." & [0034] "the generator may be configured to*

access a library of deployment descriptors to generate deployment descriptors that will

configure run time environments to execute tests. ").

- an adaptive compiler to compile the temporary source file into a compiled program to

  generate a result based upon the monitoring statement ([0031] *"the test code may provide*

  reports on processes that are not normally visible to users during execution" & [0040]

  "after different test was inserted before compilation and/or packaging").

- a processor to execute the compiled program ([0042] *"the test may be executed to assess*

  the operation and functions of the application to be tested as deployed").

- an output device to communicate the result ([0042] *"Data indicating the results of*

  execution may be collected during execution of a test. ").

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

12.   Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jorapur, in view of

Friedman et al. (US Patent No. 7,171,588 B2, hereinafter "Friedman").

13.   Per claim 8

the rejection of claim 1 is incorporated and Jorapur do not disclose

- the monitoring statement comprises inserting a time stamp statement into the temporary

    source file to capture a time stamp.

But Friedman discloses

- the monitoring statement comprises inserting a time stamp statement into the temporary

    source file to capture a time stamp (col.7 lines 8-10 *"The transaction numbers, input and*

    output objects, elapsed time and success or failure can be recorded by the probes").

- Therefore, it would have been obvious to a person of ordinary skill in the art at the time

    the invention was made to modify teaching of Jorapur with the teachings of Friedman to

    include the monitoring statement comprises inserting a time stamp statement into the

    temporary source file to capture a time stamp in order to calculate out the time for the

    EJB test engine to determine the actual time spent (Friedman, col.8 lines 15-17).

14.   Claims 10, 11, and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Jorapur, in view of Gallardo ("Getting Started with the Eclipse Platform" from IBM on Nov. 1

2002).

15.   Per claim 10

the rejection of claim 9 is incorporated and Jorapur do not disclose

- the file creator comprises an extensible integrated development environment having a

    language development tool plug-in.

But Gallardo discloses

- the file creator comprises an extensible integrated development environment having a language development tool plug-in (Gallardo described this on page 1 *"Because everything in Eclipse is a plug-in, plug-ins are available or planned that include support for programming languages like C/C++ and COBOL"*).

- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Jorapur with the teachings of Gallardo to include the file creator comprises an extensible integrated development environment having a language development tool plug-in in order to use Eclipse as a Java IDE includes the Plug-in development environment (PDE) and provide a consistent, unified integrated development environment for users (Gallardo, on page 1).

16.   Per claim 11

the rejection of claim 9 is incorporated and Jorapur do not disclose

- the file creator comprises a program editor selected from a group of program editors comprising a Graphical User Interface program editor and a command line program editor.

But Gallardo discloses

- the file creator comprises a program editor selected from a group of program editors comprising a Graphical User Interface program editor and a command line program editor (Gallardo described this on page 3 *"The panel to the right of the Navigator is the*

editor area. Depending on the type of document selected in the Navigator, an appropriate

editor window opens here." & **Fig.1**).

- The feature of providing the file creator comprises a program editor selected from a

    group of program editors comprising a Graphical User Interface program editor and a

    command line program editor would be obvious for the reasons set forth in the rejection

    of claim 10.

17.   Per claim 17

the rejection of claim 15 is incorporated and Jorapur do not disclose

- terminating the executing in response to selection of a cancel button by a user.

But Gallardo discloses

- terminating the executing in response to selection of a cancel button by a user (Gallardo

    described this on page 9 "This view shows the call stack and has a toolbar in the title bar

    that allows you to control the execution of the program, including buttons to resume,

    suspend, or terminate the program" & **Fig.6**).

- The feature of providing terminating the executing in response to selection of a cancel

    button by a user would be obvious for the reasons set forth in the rejection of claim 10.

18.   Claims 3-5, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Jorapur, in view of Partamian et al. (US Patent No. 7,062,755 B2, hereinafter "Partamian").

19.   Per claim 3

the rejection of claim 1 is incorporated but Jorapur does not disclose

- the compiling comprises: initiating compilation of the temporary source file; attempting

    to resolve a compilation error; and outputting the compilation error.

However Partamian discloses

- the compiling comprises: initiating compilation of the temporary source file (col.5 lines

    56-57 & Fig. 3 step 308); attempting to resolve a compilation error (col.1 lines 64-66)

    and outputting the compilation error (col.4 lines 61-63).

- Therefore, it would have been obvious to a person of ordinary skill in the art at the time

    the invention was made to modify teaching of Jorapur with the teachings of Partamian to

    include initiating compilation of the temporary source file, attempting to resolve a

    compilation error, and outputting the compilation error in order to provide a solution to

    prevent a fetal error in the compiler caused the virtual machine to crash (Partamian, col.1

    lines 30-35).

20.   Per claim 4

the rejection of claim 3 is incorporated and Partamian discloses

- comprising assigning data to a variable to resolve the compilation error (col.6 lines 14-

    20; *if the failed phase is essential for compilation and/or contributes significantly*

    towards the performance of the compiled code, then the compiler attempts to replace that

    failed phase with a simpler version).

21.   Per claim 5

the rejection of claim 1 is incorporated but Jorapur does not discloses

- compiling comprises: initiating compilation of the temporary source file; and resolving a compilation error encountered during compilation.

However Partamian discloses

- compiling comprises: initiating compilation of the temporary source file (col.5 lines 56-57 & Fig. 3 step 308) and resolving a compilation error encountered during compilation (col.1 lines 60-66 *"If compilation of a particular region results in a fatal error..."*).

- The feature of providing compiling comprises: initiating compilation of the temporary source file; and resolving a compilation error encountered during compilation would be obvious for the reasons set forth in the rejection of claim 3.

22.   Per claim 13

Partamian discloses

- the adaptive compiler is able to initiate compilation of the temporary source file before the source file is able to be compiled (col.5 lines 56-57 & Fig. 3 step 308).

23.   Per claim 14

Partamian discloses

- the adaptive compiler is able to initiate compilation of the temporary source file (col.5 lines 56-57 & Fig. 3 step 308), output a compilation error (col.4 lines 61-63), and alter contents of the temporary source file to resolve the compilation error (col.6 lines 14-20).

24.   Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorapur,

in view of Gertz et al. (US Pub. No. 20040003335 A1, hereinafter "Gertz").

25.   Per claims 18

the rejection of claim 15 is incorporated but Jorapur does not discloses

- compiling comprises inserting a line of code into the temporary source file to resolve a

  compilation error.

However Gertz discloses

- compiling comprises inserting a line of code into the temporary source file to resolve a

  compilation error ([0036] *"The user can select a suggested correction, and then the*

  system corrects the error in the current line of code (i.e., locally) or at other locations in

  the code, and also corrects other problems, errors, or issues throughout the code that are

  related to the initial error.").

- Therefore, it would have been obvious to a person of ordinary skill in the art at the time

  the invention was made to modify teaching of Jorapur with the teachings of Gertz to

  include compiling comprises inserting a line of code into the temporary source file to

  resolve a compilation error in order to provide systems and methods for a user to quickly

  repair an error in his code, without requiring the user to be highly knowledgeable about

  underling error concepts (Gertz, [0008]).

26.   Per claims 19

the rejection of claim 15 is incorporated but Jorapur does not discloses

- compiling comprises prompting a user to input a library name to insert the line of code

   from the library into the temporary source file to resolve a compilation error.

However Gertz discloses

- compiling comprises prompting a user to input a library name to insert the line of code

   from the library into the temporary source file to resolve a compilation error ([0036]

   "The present invention provides systems and methods via an interface (referred to herein

   as an error correction interface) for a user to repair a detected error in his code." &

   [0055] *"There is a library (e.g., a table) of all the errors that tell whether the error is*

   fixable or not. The table also tells what actions can be taken to correct the error for

   which suggested corrections are available.").

- The feature of providing compiling comprises prompting a user to input a library name to

   insert the line of code from the library into the temporary source file to resolve a

   compilation error would be obvious for the reasons set forth in the rejection of claim 18.

27.   Claims 12 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jorapur,

in view of Melamed et al. (US Pub. No. 20040107415 A1, hereinafter "Melamed").

28.   Per claim 12

the rejection of claim 9 is incorporated but Jorapur does not discloses

- the file creator is able to create the temporary source file based upon the code segment,

   wherein the code segment is selected from a group of code segments comprising a code

   segment to parse strings, a code segment to perform binary shifting, a code segment to

format files, a code segment of an Application Programming Interface, and a code

segment of a library.

However Melamed discloses

- the file creator is able to create the temporary source file based upon the code segment,

  wherein the code segment is selected from a group of code segments comprising a code

  segment to parse strings, a code segment to perform binary shifting, a code segment to

  format files ([0051] *"scripts and/or computer program code for parsing any and all*

  strings in the encoded files into test scripts recognized by the automation tool...") , a

  code segment of a library ([0089] *"...a variety of built-in library functions ..."*), and a

  code segment of an Application Programming Interface ([0080] *"...associated APIs at*

  expat/xmlparse/xmlparse.h ...")

- Therefore, it would have been obvious to a person of ordinary skill in the art at the time

  the invention was made to modify teaching of Jorapur with the teachings of Melamed to

  include the file creator is able to create the temporary source file based upon the code

  segment, wherein the code segment is selected from a group of code segments

  comprising a code segment to parse strings, a code segment to perform binary shifting, a

  code segment to format files, a code segment of an Application Programming Interface,

  and a code segment of a library in order to provide automation tool generated test scripts

  and run them against the software application being tested (Melamed [0051])

29.   Per claim 20

the rejection of claim 15 is incorporated but Jorapur does not discloses

- deleting the temporary source file

However Melamed discloses

- deleting the temporary source file ([0065] "Clicking the corresponding check-box and clicking the delete button can delete one or more steps of the test case.").

- Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify teaching of Jorapur with the teachings of Melamed to include deleting the temporary source file in order to allow the user to use the test case authorizing tool for delete cases using delete button (Melamed, [0065]).

30.   Claims 15 and 16 are machine-accessible medium claim corresponding to method claims 1 and 2 respectively, and rejected under the same rational set forth in connection with the rejection of claims 1-11 respectively, above, as noted above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Junchun Wu whose telephone number is 571-270-1250. The examiner can normally be reached on 8:00-17:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wei Zhen can be reached on 571-272-3708. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JWu

WEI ZHEN
SUPERVISORY PATENT EXAMINER